UV Distributed Information Management
Summer semester 2022

Assignment 3 – Addendum

This document contains additional remarks regarding some unclear aspects of the solution to
Assignment 3.

Commands and queries are wrapped in a framed listing environment which also specifies the
used command-line tool at the beginning of the title (separated by a dash –). The following
listing shows an example that executes the command `ls` in a Linux `terminal` (explanatory
comments are shown in gray and are not part of the command):

```
terminal – Show directories.
1  ls     # this is a comment (i.e., not part of the command)
```

Transaction and Query Execution

For a given session object, called `session`, Python's Neo4j driver has different ways of executing
a transaction [1]:

1. `session.read_transaction(.)`: A read transaction only allows the user to execute (one
   or multiple) read-only queries as part of a transaction.

2. `session.write_transaction(.)`: A write transaction allows the user to read *and* to actively modify the database, again using one or multiple queries.

3. `session.run(.)`: Is a simple way to execute a single query with autocommit (i.e., the user
   does not have to commit the query explicitly). In contrast to a transaction, only a single
   query can be executed at a time, i.e., it is not possible to encapsulate multiple queries
   within a transaction using this method.

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[1]`https://neo4j.com/developer-blog/neo4j-driver-best-practices/`